Table A.2.17 North Field/Main Yard SWMU 53 Summary of Boring Log and Analytical Data

Boring/ Date/ Report	Total Depth of Boring	Depth to Water[1]	Lithologic Description[2] (Observation Notes)	Maximum PID Response, ppm_v (Depth)	Sample Type[3]	Sample ID (Depth)	Analyses[4]	COC Concentrations greater than Delineation Criteria
S1581/ NF2-Pit12 12/13/02 NF2 LNAPL Area	5		Fill: 0-5 (red bricks, flyash, black staining)	2084 (5)	LNAPL	S1581 (4.5-5)	GC fingerprint, TPH?	Mineral spirits: 11000 mg/kg TPH: 12000 mg/kg
S0782 7/22/02 Full RFI SWMA 1	20	17?	Fill: 0-19: (black staining at 6-11; odor at 13-15; black, silt, asphalt texture at 15-16; black silt, LNAPL test—sheen and 1/8" diameter globules) Peat: 19-20	5 (14-14.5)	O,U,F	S0782A1/A4 (0-0.5/1.5-2)	V,S, M, TOL	None
					O,S,F	S0782I4 (17.5-18)	V,S, M, TOL	Copper: 3450 mg/kg Iron: 32400 mg/kg Vanadium: 454 mg/kg
					O,S,N	S0782J4 (19.5-20)	V,S, M, TOL	None
S0763/ MW116[5] 7/18/02 Full RFI SWMU 53	12	2.5	Fill: 0-9: (foundry sand, petroleum odor at 2.5-7.2; black stain at 7.2-9) Peat: 9-10 Silt: 10-12	100 (7-7.5)	O, U, F	S0763A1/A4 (0-0.5/1.5-2)	S, M, TOL V	Iron: 31800 mg/kg
					O, S, F	S0763B4 (3.5-4)	V, S, M, TOL	*Benzene: 2.98 mg/kg (Impact to Groundwater—not applicable)* Antimony: 22.6 mg/kg Lead: 468 mg/kg
					O, S, N	S0763F4 (11.5-12)	V, S, M, TOL	Iron: 26100 mg/kg
					None	MW116		LNAPL Detected
H0458[5] 10/19/99 2nd OWSS NF2	12	1	Fill: 0-11 (hydrocarbon odor, black staining at 1-4; severely stained, sheen on gravel/fly ash, hydrocarbon odor at 10-11) Meadow mat: 11-12 (H2S odor)	117 (10-11)	Water	H0458	V, S, M	**Benzene: 300 ug/l** Xylenes: 310 ug/l Lead: 12.8 ug/l

Table A.2.17 North Field/Main Yard SWMU 53 Summary of Boring Log and Analytical Data

Boring/ Date/ Report	Total Depth of Boring	Depth to Water[1]	Lithologic Description[2] (Observation Notes)	Maximum PID Response, ppm_v (Depth)	Sample Type[3]	Sample ID (Depth)	Analyses[4]	COC Concentrations greater than Delineation Criteria
H0189 1/13/99 1st Groundwater Addendum SWMA 2	12	9.6	Fill: 0-12:	0	Water	H0-189	M	Lead: 54.1 ug/l
H0188 1/13/99 1st Groundwater Addendum SWMA 2	14	8.5	Fill: 0-14: (hydrocarbon odor at 10-14; slight sheen on wall of spoon at 12-14)	63 (12-13)	Water	H0-188	M	None
TPZ5GW 3/2/98 1st Groundwater SWMU 53	10	0.55	Fill: 0-10: (slight oily sheen at 2.5, creosote odor; black staining and hydrocarbon odor at 6; hydrocarbon odor at 7-8)	4 (5-6)	None			
TPZ5AGW 3/2/98 1st Groundwater SWMU 53	10	1.72	Fill: 0-10: (black stained soils, slight hydrocarbon odor at 0-2; oily product throughout core at 2-4) Peat: 7-8 (strong hydrocarbon like smell) Fill: 8-10	4 (5-6)	None			
TPZ4GW 3/2/98 1st Groundwater SWMU 53	10	.74	Fill: 0-9:	0	None			
H0123[5] 4/3/98 1st Groundwater SWMU 53	10	1.72	Fill: 0-8: (oily product throughout core at 2-4) Peat: 7-8 (strong hydrocarbon-like smell) Fill: 8-10	20 (0-2)	Water	H0123	V, S	**Benzene: 476 ug/l** Benzenethiol: 152 ug/l Xylenes: 705 ug/l 2,4-Dimethylphenol: 392 ug/l
H0122 4/3/98 1st Groundwater SWMU 53	6	2	Fill: 0-6 (black staining with hydrocarbon odor at 2-3)	0	Water	H0122	V, S	None

Table A.2.17 North Field/Main Yard SWMU 53 Summary of Boring Log and Analytical Data

Boring/ Date/ Report	Total Depth of Boring	Depth to Water[1]	Lithologic Description[2] (Observation Notes)	Maximum PID Response, ppm_v (Depth)	Sample Type[3]	Sample ID (Depth)	Analyses[4]	COC Concentrations greater than Delineation Criteria
HP0098 9/4/97 1st Groundwater SWMA 2	10	8	See SB0130	0	Water	HP0098A	V, S, M	Arsenic: 315 ug/l Beryllium: 22.7 ug/l Chromium: 1130 ug/l Lead: 821 ug/l Mercury: 15.5 ug/l Nickel: 384 ug/l Vanadium: 2120 ug/l
HP0097 9/4/97 1st Groundwater SWMA 2	10	8	See SB0124	0	Water	HP00097A	V, S, M	Arsenic: 262 ug/l Beryllium: 20.5 ug/l Chromium: 1690 ug/l Lead: 663 ug/l Mercury: 24.4 ug/l Nickel: 716 ug/l Vanadium: 2240 ug/l
HP0089 9/27/97 1st Groundwater SWMU 53	10	1	See SB0159	0	Water	HP0089A	V, S	None
SB0161 12/8/95 1st Soils SWMU 53	6	4.5	Fill: 0-3.8: (catalyst beads at 2-3.8) Clay and Silt: 3.85	0	O, U, F	SB0161SB (2-4)	V, S	Benzo(a)anthracene: 1 mg/kg **Benzo(a)pyrene: 0.99 mg/kg**
SB0160 12/8/95 1st Soils SWMU 53	6	5.2	Fill: 0-5: (trace brick fragments at 0-2) Silt and Sand: 5-6	0	O, U, F	SB0160SB (2-4)	V, S	None
SB0159 12/8/95 1st Soils SWMU 53	6	4	Fill: 0-5.8: (trace red brick fragments at 0-2; dark staining, petroleum odor; catalyst beads at 2-4 Peat: 5.8-6 (heavy staining)	0	O, U, F	SB0159SB (2-4)	V, S, TPH	Benzo(a)anthracene: 3.5 mg/kg **Benzo(a)pyrene: 1.1 mg/kg** Benzo(b)fluoranthene: 1.8 mg/kg

NOTES:

Benzene and benzo(a)pyrene are highlighted in bold because they are indicator constituents of concern (COCs)

Shaded rows indicate samples collected from nearby SWMUs/AOCs

ppm_v = parts per million (volume basis)

All depths referenced on this summary table are in feet below the ground surface.

PID = Photoionization detector.

ID = Identifier.

mg/kg = milligrams per kilogram (equivalent to parts per million).

µg/L = micrograms per liter (equivalent to parts per million).

[1]Depth to water as observed during borehole advancement.

[2]"Fill" encountered within the completed borings was characteristically described as an asphalt layer (typical) underlain by a heterogeneous gravel to clay mixture of unconsolidated materials, ranging in color from tan to gray with occasional construction debris (e.g., brick) present. In some locations, the fill material is further characterized by containing a slag or beaded material, in which case it is noted within the table. Also noted on the table are any other olfactory or visual observations that indicate potential petroleum-type impacts within the fill unit were observed.

[3]P – property boundary, O – on-site, U – unsaturated, S – saturated, F – fill, N – native. "None" indicates that no sample was collected.

[4]V – VOCs, S – SVOCs, M – metals, Pb – lead, TOL – total organic lead, TEL – tetraethyl lead, TPH – Total Petroleum Hydrocarbons; SPLP– Synthetic Precipitation Leaching Procedure; -Phys. Char.--physical characteristics.

[5] Sample is located in a different part of the tank basin; and is close to the NF2 LNAPL plume.